

**MULLANEY ENGINEERING, INC.**

9049 SHADY GROVE COURT  
GAITHERSBURG, MD 20877

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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Grandfathered Short-Spaced )  
FM Stations )

MM Docket No. 96-120

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**Comments of Mullaney Engineering, Inc.**

Mullaney Engineering, Inc. (MEI), has reviewed the Notice of Proposed Rule Making (NPRM) and submits the following comments and suggested changes.

**Which Stations Are Grandfathered ???**

As pointed out in the NPRM in several places, while it may be difficult (but far from impossible) to initially identify all of the stations that qualify for "grandfathered" status the number is certainly a small sub-set of the total number of FM facilities. With little risk of being wrong, one can "assume" that **grandfathered status applies** to 99 percent of all FM short spacing that exceeds 8 km (5 miles) provided the stations were not granted under the contour protection section (73.215) adopted in 1989 and provided they were not short spaced as a result of the 6 kW rules also adopted in 1989. Consequently, it should be much easier than suggested in the NPRM to initially identify nearly all grandfathered stations.

**Expand to Include 1984 Metrifications**

We believe the definition of which stations are grandfathered should be expanded to include the short spacings that resulted in the "metrification" of the rules in 1984. The largest category of stations so affected are

Class A stations on the 2nd or 3rd adjacent channel of a Class B facility. Prior to 1984, the required A to B separation was 63.56 km (39.5 miles with tolerance). However, in 1984 this spacing was increased to 68.5 km (42.57 miles with tolerance). This is an increase of 4.94 km (3.1 miles).

The current NPRM has limited the grandfathered definition to "Pre-1964" short spacings. However, we submit that some of the stations that became short spaced for the first time in 1984 also qualify under the 1964 definition since some surely existed in 1964 at that very same site. In addition, like the 1964 stations, the 1984 stations became short spaced through **no fault of their own**.

The current rules do not address how to handle the 1984 short spaced stations. Today a Class B facility which is not at maximum power may still apply for an increase in facilities notwithstanding the fact that it may be a 1984 short spacing. However, in contrast, a Class A 3 kW facility is prohibited from filing for 6 kW unless it can obtain the agreement of the Class B facility per Section 73.213(c). The limitation on an increase in ERP for a Class A facility is **inconsistent and unfair**. It should be noted that the required separation between 2nd & 3rd adjacent A & B facilities is the same for both 3 & 6 kW operation. The required separation is 69 km. Why then are Class B stations permitted to increase to maximum facilities while Class A stations are prohibited from doing so.

It should be noted that in 1984 the HAAT of a Class A facility was increased from 91.44 meters (300 feet) to its current limit of 100 meters (328 feet). At that time and as is the policy today, Class A stations were given permission to increase their HAAT or to increase

their equivalent reduced ERP so as to achieve facilities equal to 3 kW at 100 meters.

We believe that Class A stations that became short spaced in 1984 as a result of metrification should be similarly included in the 1964 grandfathered definition.

#### **Class A Stations Entitled to 6 kW**

Like other Classes of stations Class A's should be permitted to operate with up to the maximum facilities currently specified in Section 73.211. The pre-1987 version of Section 73.213 contained a table of permissible facilities which varied depending upon what actual range of separation existed between the two short spaced stations in question. If the short spacing was minor, no reduction in ERP was required. However, the ERP in other than minor situations was reduced to 50%, 20% or 10% of the maximum permitted depending upon just how severe the short spacing was going to be. The one exception to this was that a Class A facility **never reduced** its ERP if the short spacing involved a station of a higher class (B or C). A Class A station only reduced its ERP if the short spacing involved another Class A facility.

#### **Co-Channel Interference Criteria**

Whether the grandfathered rules rely on a standard based upon overlap of contours or based upon the actual resulting interference should not make much difference in the long run. While a standard using resulting interference is more accurate it is certainly more difficult & time consuming to determine. Given the limited resources of the staff it would appear that a contour overlap approach would be more justified and easier to administer.

No matter which criteria is adopted we believe that less emphasis should be place on the area involved and more emphasis on the number of persons involved in the interference. Over the past years, we have seen many instances where the area subject to interference was mainly swamp, marsh, a wildlife area or forest. To establish a policy that protects such areas as if they were inhabited is foolish. If nothing else a footnote should be added to the rules indicating such supplementary showings are permitted. That is increases in land area can be justified if the population subject to interference decreases.

#### Co-Channel Protection of the 1.0 mV/m Contour

The initial petitioners indicated that the protected contour of grandfathered stations should be uniformly established as the 1.0 mV/m or the 60 dBu contour. However, the NPRM has indicated that it will use the 0.5 mV/m for Class B and the 0.7 mV/m for Class B1 stations. We urge the staff to reconsider and to strictly use a uniform 1.0 mV/m contour for all classes of stations.

It should be noted that all versions of Section 73.213 strictly referred to the 1.0 mV/m contour for all classes of stations. While Class B and B1 stations are now protected to different contours we are not talking about stations that meet today's rules. The very nature of being "grandfathered" means that something is different about these stations. The lack of proper spacing by its very nature means that the station is not being fully protected.

In the 6 kW Class A docket it was clearly established that the spacing determined in 1964 and used until 1989 for 1st adjacent Class A & B facilities did not fully protect the Class B to its 0.5 mV/m contour. With the Class A operating

at 3 kW the required spacing to protect the 1.0 mV/m contour of a Class B was 102.4 km whereas 116.7 km was required to protect the 0.5 mV/m contour. It should be noted that the required 3 kW separation was only 105 km which was far below that required for full protection of the Class B contour. It was for this reason that the staff selected a required 6 kW spacing of 113 km as a compromise to the actual separation of 124.7 km required for full protection of the Class B contour.

Use of the 0.5 mV/m contour for Class B facilities will make it difficult for Class A facilities to propose modifications since they are penalized for a mistake initially designed into the rules. Use of a uniform 1.0 mV/m contour would avoid this problem.

It should be understood that the selection of a protected contour is simply an administrative convenience. Class C2 and Class B non-commercial stations both of which are authorized the same maximum facilities (50 kW at 150m) are only protected to the 1.0 mV/m contour. It should be noted that all educational stations are uniformly protected to the 1.0 mV/m contour regardless of class. Lastly, it should also be noted that Class D secondary facilities are only required to protect commercial Class B or B1 facilities to the 1.0 mV/m contour. Certainly, a full service FM facility could not be required to provide more protection than does a Class D secondary facility.

### **2nd & 3rd Adjacent Channel Situations**

A modification of the current rules regarding 2nd and 3rd adjacent stations is essential for an efficient evolution of FM facilities in the future. With the installation of HDTV facilities in the near future some FM facilities will find

that their tower leases will not be renewed. Consequently, those facilities if also involved in a grandfathered 2nd or 3rd adjacent channel short spacing will find it nearly impossible to re-locate without a substantial reduction in their facilities.

Stations whose transmitter sites are located within the protected contour of another station are faced with the possible reduction of coverage no matter which direction they proposed to re-locate. Until recently, even stations which proposed to move farther away from the other short spaced stations were prohibited from doing so unless they reduced their facilities.

Consequently, we support the proposal to eliminate all protection requirements between grandfathered 2nd and 3rd adjacent channels. We wish to emphasize that Class A stations so situated would now be permitted to propose 6 kW if they would otherwise qualify

We do not support the alternative proposal which would make a distinction between a station with a transmitter site within the protected contour of the other station to which it is short spaced. A situation in which one site is inside and the other site is outside seems to create many inequities. For this reason, we support only the proposal to eliminate all protection requirements.

#### **Permit Simultaneous / Contingent Applications**

The NPRM proposes to totally eliminate the use of short spacing agreements between grandfathered short spaced stations. We believe that prohibiting all short spacing agreements is unwise and that maybe the staff should simply require a "higher level" of public interest to justify grant

of an application. In any event, we wish to clarify that short spacing agreements subject to the 6 kW upgrade provisions of Section 73.213(c) are still permissible.

In instances involving grandfathered stations we believe that the rules should permit both stations to file simultaneous applications that are contingent upon each other. In this way it is possible for one station to negotiate a reduction by the other station, thereby maintaining a no growth in total interference.

#### **Actual Text of Proposed Rules**

The actual text of the proposed rules contained as Appendix A to the NPRM could use some clarification. Depending upon the outcome of a uniform protected contour and the use of area and/or population, other changes may be necessary.

The suggested wording for paragraph (a): states that "...provided no new area..." whereas it should state "...provided no larger area...". The NPRM permits the shifting of the location subject to interference which by its very nature could involve area never before encompassed ("new").

Paragraph (a)(2) should specifically state that while the application may propose an increase to the interference it receives the application must not propose any increase to the interference caused.

A new paragraph (a)(3) should be added to specifically address the situations involving 2nd and 3rd adjacent channels. The current lack of any positive statement on the subject will require the staff to waste its valuable time and resources answering obvious questions from

members of the general public. A simple statement would  
avoid countless time consuming questions.

Respectively submitted.

  
John J. Mullaney

July 19, 1996.